

What is claimed is:

1. An integrated high-ohmic polycrystalline silicon resistor comprising a substrate (1), a dielectric substance (2), a resistance layer and contacts (4), the resistance layer consisting of a polycrystalline layer (3) of SiGe:C and the polycrystalline layer (3) being doped with doping elements, in particular boron or phosphorus.
2. A method of fabricating an integrated high-ohmic polycrystalline silicon resistor of claim 1, characterized by the method steps of:
 - precipitating a dielectric substance (2) on a substrate (1), in particular a silicon wafer,
 - forming a polycrystalline layer (3) of SiGe:C, the polycrystalline layer (3), the polycrystalline layer (3) being carried out by *in situ* precipitation of SiGe:C or implantation of Si with Ge:C followed by annealing, *
 - doping the polycrystalline layer (3) with doping elements, in particular boron or phosphorus;
 - further precipitation of the dielectric substance (2) and fabricating the metallic contacts (4).

*) Something is amiss in this section of the German claim. It should (in English translation) correctly state: "...the formation of the polycrystalline layer (3) being carried out...." (Translator's note).

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